



THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION

Meeting Minutes for August 10, 2000

Commission Members in Attendance:

Peter C. Webber	Commissioner, Department of Environmental Management
Glenn Haas	Designee, Department of Environmental Protection
Mark P. Smith	Designee, Secretary of Environmental Affairs
Joseph E. Pelczarski	Designee, Coastal Zone Management
Marilyn Contreas	Designee, DHCD
Joseph McGinn	Designee, Metropolitan District Commission
Russell Cohen	Designee, DFWELE
Gary Clayton	Public Member
Richard Butler	Public Member

Others in Attendance:

Mike Gildesgame	DEM, Office of Water Resources
Jackie Murphy	EOEA
Richard Thibedeau	DEM
Michele Drury	DEM, Office of Water Resources
Linda Marler	DEM, Office of Water Resources
Vicki Gartland	DEM, Office of Water Resources
Lealdon Langley	DEP DWM
Gretchen Roorbach	MWRA
Lorraine Downey	MWRA
Pine DuBois	Jones River Watershed Association
Lou Wagner	MAS
William Nunnery	Earth Tech
Steve Garabedian	USGS

Agenda Item 1: Executive Director's Report

- Smith noted that the MWRA completed the Boston Harbor outfall tunnel. This has been a long and difficult part of the Boston Harbor Clean-up project. Completion of the tunnel is a big step toward finishing this project.
- An emergency bond bill was passed at end of last legislative session that including increases authorizations for the environmental agencies. The bill includes funding for the Watershed Initiative projects being completed by the watershed teams. Funding for the USGS cooperative program was not included in the bond bill. Getting this program funded will be a high priority for the next year.
- MEPA issued a certificate on the Bluestone Final EIR. MEPA found the FEIR to be adequate, so now the project moves to regulatory sphere. Many environmental issues still need to be

addressed under these regulatory programs. Drury added that Staff will be requesting additional information required for the Interbasin Transfer review. We hope to get this request to the WRC by the September meeting. Smith stated that he met with Brockton to address concerns on how to move forward with their proposed water purchase from Bluestone. He reminded the Commission that in 1996, they laid out a path designating the responsibilities for Bluestone and potential member communities under the IBT. Brockton wanted to understand how that decision and the Secretary's certificate fit together. Smith has agreed to help coordinate the various regulatory programs to provide clarify for communities, the City of Brockton and Bluestone what to expect through all the permitting processes (IBT, WMA, etc).

- Foxborough has submitted its Interbasin Transfer application for their proposed wells in the Witch Pond Swamp. Smith reminded the Commission that Foxborough had taken an interest in the review of Mansfield's application to transfer water from the same area. The Foxborough application is being reviewed for completeness. The WRC will be updated at the September meeting.

- There was another meeting of the wastewater task force. This group continues to make good progress on addressing how wastewater issues are addressed under the Interbasin Transfer Act.

- Jackie Murphy has been taking the lead on the outside water use task force. Smith stated that the wet summer has granted us a reprieve, but communities have not lost interest. Murphy distributed copies of the work plan that the task force has developed. She highlighted the major points. Landscape water use is the focus of the task force. The objective is to maximize outdoor water conservation, increase public awareness of the impact of outdoor water use on local water supplies and resources, increase public awareness of the technology available to enhance outdoor water conservation, and support efforts of water suppliers to provide adequate supplies of water and promote outdoor water conservation. The work plan is divided into four areas:

1. Public education
2. Technical guidance for municipalities (bylaws, drought management plans, etc)
3. Policy options for WRC to endorse, perhaps as an addendum to the water conservation standards
4. Regulatory options for state agencies (WMA, IBT, standards for irrigation, etc)

Smith mentioned that the task force was working with Mike Walsh, a landscape designer who has a presentation about all the other benefits you get from reducing lawn watering: less maintenance (cutting), more privacy (from planting shrubs rather than grass), less pesticides and runoff of nutrients from fertilizers.

Cohen stated that it is wasteful to use potable water for lawns and irrigation. He stated that the task force might want to explore the use non-potable water for irrigation. Murphy stated that this would be an issue explored under regulatory options. Smith stated that private wells may also be addressed. The task force is talking to DEP about environmental issues associated with private wells. Webber suggested that an option might be to encourage people to think about recycling rainwater (covered rain barrels, underground cisterns) or perhaps using graywater for irrigation. This could tie into working with landscapers to design systems that can take advantage of these things. Smith agreed that the task force should address this. In October, Murphy will present a more substantial draft of the policy technical guidance document.

- Marler gave current conditions report:

- Precipitation in July was above normal. The cumulative statewide precipitation was at 113%. We are now as high above normal as we have been below normal last year at this time. The western region received the most precipitation above normal for the water year.
- Cape Cod groundwater levels are still below normal.
- Streamflow readings are five times higher than the median value. This is very unusual and a great improvement over where we were last year at this time. Last year we were below normal. We haven't been below normal since April of this year. So the drought prediction for this year is not panning out. This past week has been dry, but the predictions from the Climate Prediction Center are for near normal temperature and precipitation for August, although the next 6-10 days are supposed to have above normal temperatures and below normal precipitation.
- The hurricane season for the Atlantic has begun. Hurricane Alberto is out in the mid-Atlantic now, but it is projected to stay out in the ocean. However, there is another tropical depression right behind Alberto. Awareness and preparation are key for the next couple of months.

Cohen suggested that this might be a good year for communities to figure out what their baseline water use is, as there has been so little outdoor water use. By comparing this year to other years, one could try to figure out what is attributable to outdoor water use. Smith suggested comparing this year to last year, which was very dry.

• Gildesgame indicated that he had updated copies of WRC members' addresses and phone numbers available, as well as copies of the notices of availability of planning assistance from the ACOE. This was advertised in the August 8th issue of the Environmental Monitor and applications will be due in September.

Agenda Item 2: Applicability of the Interbasin Transfer Act to MWRA's proposed work on the Wachusett Aqueduct

Drury acknowledged the presence of Gretchen Roorbach and Lorraine Downey from the MWRA. Rehabilitation of the Wachusett Aqueduct is part of the Walnut Hill treatment plant project. Originally Wachusett Aqueduct was the main conduit to the Boston metropolitan area. It was replaced by the Cosgrove Tunnel and put on standby status for use in emergencies. It also has been used to supply the town of Northborough and the Westborough State Hospital. Its current capacity is 300 mgd. Its future capacity will be reduced to 240 mgd and it will no longer be used to supply Northborough and the Westborough State hospital. The Cosgrove Tunnel has current capacity of 600 mgd. Once the Walnut Hill Treatment Plant is online, it will be limited to 405 mgd by the capacity of the treatment plant. This results in a reduction in the interbasin transfer out of the MWRA system. The MWRA plans to use the rehabilitated Wachusett Aqueduct to provide redundancy to the Cosgrove Tunnel. The IBT regulations specifically exempt projects if the sole purpose is to provide redundancy.

Eileen Simonson, who couldn't make today's meeting, requested that we change our Staff Recommendation to state that there are cases where this project could be used to increase the capacity of the MWRA system if the system was pressurized or if the treatment plant was bypassed. At this point those options are not proposed by the MWRA, but conceivably this could happen. The Staff Recommendation presented last month has been amended to

recommend that this project, as currently proposed, is not subject to the Interbasin Transfer Act. The recommendation deals solely with this Wachusett Aqueduct Rehabilitation project, as currently proposed. If the MWRA proposes to pressurize the system or by-pass the Walnut Hill Treatment plant or proposes other projects that result in an increase in the capacity of the system, the Act could be triggered.

Clayton asked about the timeline for the project. Roorbach stated that the Aqueduct would be used for approximately six months, starting in November 2001. Smith stated that the aqueduct had to be completed in time for the hookup to the treatment plant. Roorbach stated it has to be finished in May 2002. The whole project should be completed by the fall of 2004/spring of 2005.

V O T E	Clayton moved with a second by McGinn to:
	Approve the Staff Recommendation that the Wachusett Aqueduct Rehabilitation project is exempt under the Act, as per the August 10, 2000 memo to the Commission, for the following reasons:
	<ul style="list-style-type: none">• Capacity of both the Cosgrove Tunnel and Wachusett Aqueduct will be reduced by this project.• It is the intention of the MWRA to use the rehabilitated Wachusett Aqueduct to provide redundancy for the Cosgrove Tunnel and the IBT regulations specifically exempt projects if the sole purpose is to provide redundancy.• If the MWRA proposes changes, such as pressurizing the aqueduct, by-passing the Walnut Hill Treatment plant or proposes other projects that result in changes to the system or operating rules that result in an increase in the capacity of the system, it should consult the WRC to determine if the Interbasin Transfer Act is triggered.
	The motion was approved unanimously

Agenda Item 3: Vote on the meeting minutes for January and February 2000

Clayton stated that he would not vote on the January 13th meeting since he was not present.

V O T E	Haas moved with a second by McGinn to:
	Approve the January 13, 2000 meeting minutes
	The minutes were approved with 2 abstentions

V O T E	Contreas moved with a second by Webber to: Approve the February 10, 2000 meeting minutes The minutes were approved with 2 abstentions.
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Agenda Item 4: Ashland's request to increase its Water Management Act withdrawal volume to serve Hopkinton

Smith stated that we had discussed this issue in detail at the July meeting. Drury acknowledged Bill Nunnery, from Earth Tech, consultant for the Town of Ashland.

Drury reminded the Commission of the Determination of Insignificance requested by Hopkinton and approved last November. Hopkinton had requested to purchase up to 1 mgd from Ashland from existing sources and sources to be developed adjacent to the Hopkinton Reservoir in the town of Ashland. Only a small amount of water (0.05 mgd) leaves basin. Most will be returned via the Westborough wastewater treatment plant. This agenda item is to follow up on the Water Management Act requirements to allow this to happen.

Langley pointed out the town and basin lines on the map. The proposed increase in Water Management Act (WMA) volumes will allow the town of Ashland to distribute 0.5 mgd on average, and up to 1 mgd on a maximum day to Hopkinton. That volume will replace water currently being withdrawn in the town of Hopkinton. There is no proposed increase in either of the towns' total authorized withdrawal volume. There have been similar situations under the WMA and what has been done is that each town's permits were limited to the total volume defined by the water needs forecasts approved by WRC. Neither town received an increase for their own use through this process. Water bought or sold and water provided by the town's own system would always have to be equal to approved water needs forecast.

In 1999, Hopkinton had an average annual water use of 0.78 mgd. They are permitted for 0.89 mgd. They are in compliance with their permit and registration. Hopkinton's unaccounted-for water in 1999 was 10.5%. Ashland's total permitted and registered volume is currently 1.42 mgd. The next 5 year block increase will take effect in September 2001 and will increase to 1.48 mgd. With this request, the numbers for the existing 5 year block will become 1.92 mgd. This represents the addition of 0.5 mgd to serve the Hopkinton system.

Clayton asked what was wrong with the Hopkinton wells. Langley answered that they had water quality problems, with high levels of iron and manganese. Nunnery confirmed that the wells had iron and manganese problems and added that the wells were overstressed. Hopkinton instituted water restrictions last month. One of their wells is clogged up because of these problems. The town has no redundant sources. The wells are pumped for 24 hours/day. The intent of this purchase is to rest the wells and get them on a more normal 16 hour pumping schedule. The wells will stay on line.

Contreas asked if the increases in the WMA volumes were due to population growth. Langley stated that the current number is the water needs forecasts developed according to the WRC

methodology. The increase is the amount to be sold. Drury added these were not new projections. The WRC methodology does include population projections. The only difference is that Hopkinton will now be purchasing a portion of its demand from Ashland. Therefore Ashland's permitted volume needs to increase by that amount.

Clayton asked why any water had to be transferred out of basin. Drury acknowledged that Clayton had been concerned about this during the Request for Determination of Insignificance process because Ashland was proposing to increase its capacity, which would result in an additional interbasin transfer. Staff have been in discussion with Ashland about this. The town has recently submitted engineering specifications documenting that the treatment plant's capacity will not exceed the capacity of the existing wells, plus that approved to be sold to Hopkinton. Therefore, there will not be an increase in their transfer out of basin. There are areas of Hopkinton that are served by on-site septic systems. Any transfer is just a result of these areas of Hopkinton that are not sewered. Hopkinton does have some areas in both the Blackstone and Charles River basins portions of town that are sewered back to the Concord and it is looking at different options to either expand its sewer system to the Concord basin or sewer to the Charles basin. Langley added that this had been approved by the WRC in November. Currently, water originating within the town of Hopkinton, in the Concord basin, is being transferred to the Charles and Blackstone basin. Now, it will be replaced by water originating in the same basin, but in a different town, and thus is no longer exempt under the intratown exemption. The question before us today is solely the increased volume for the purposes of Ashland supplying Hopkinton.

Drury stated that if Hopkinton continues to operate its wells as it has in the past, this transfer would still occur, but because under the WMA, Hopkinton is required to cut back on the amount pumped from its own wells, the transfer is balanced. Although Hopkinton will still have the "ability" to transfer from their own wells, in reality there will not be an increase.

Webber asked what effect this sale would have on the existing withdrawals near the Hopkinton Reservoir. Drury stated that Ashland was proposing to drill two new wells next to the Hopkinton Reservoir. That would have resulted in an increase in an Interbasin Transfer, but the town is also required to construct a treatment plant at the site because of problems with color, iron and manganese. After considering the Interbasin Transfer issues resulting from the increase in their capacity, the town has decided to mechanically limit the use of the wells. There are three existing wells now. The new specifications will limit use of wells so that only three wells can be used at one time. The plant will be the limiting factor. The new wells can only be used for redundancy. However, the information provided on this still needs to be reviewed to determine whether or not the Act applies. Drury stated that she had also been in touch with Don Stoddard (DEM Regional Supervisor) who has expressed concerns about water withdrawals adjacent to the Hopkinton Reservoir.

Gildesgame added that there was an Operations and Maintenance (O&M) plan being developed for the reservoir and dam operations by DEM. It is still in draft form. Smith added that this document may have an impact on future WMA permits and any potential IBT applications. Drury added that we will try to make the plan available to the town so that they will know what constraints they are operating under.

Webber wanted to understand today's vote and its future implications. Drury responded that the WRC is being asked to approve the increased water needs forecast for the permit amount for Ashland to sell to Hopkinton. Staff will be giving the WRC an update as to whether or not the ITA applies to Ashland's proposal. Gildesgame said that the reservoir has had a schedule for releases for about the past 40 years and that this will be continuing. The O&M plan will provide more specific detail on the releases. Webber wanted to make sure we understand that the amount sold to Hopkinton will come from increased withdrawals from the Ashland wells adjacent to the Hopkinton Reservoir. DEM has had a number of concerns about impacts to water levels, flows over the dam and downstream releases. Drury replied that these issues were looked at under the request for a Determination of Insignificance. We did determine that those impacts would be insignificant for the sale of water to Hopkinton. We have instructed Ashland to coordinate with DEM on our reservoir and dam operations. We are trying to balance all these competing issues. We have been trying to work closely with region on this.

Smith asked if there was a time to brief DEM further on this issue. Langley stated there were quality issues right now and Nunnery stated that Ashland had been ordered by DEP to begin construction of the treatment plant. The communities are proceeding in good faith; they realize that there will be restrictions. The analysis on reservoir showed that under average condition, uses are not in conflict, but that during drier periods, there will be water restrictions. The issue is how we manage the reservoir during drier periods. Ashland and the agencies have been in discussions regarding this. The communities want to see their withdrawals modeled in reservoir analysis. Smith stated that with the management plan and WMA permit there would be a mechanism to make sure the issues would be balanced. It doesn't sound as if a delay would change anything. The WMA will address this more fully. Drury added that Staff had also recommended to DEP that the reservoir management plan become part of the WMA permit. Webber stated that he would abstain from voting today, but he didn't see any need to delay the vote. He respects the fact that Staff, DEP and the Communities are wrestling with some tough issues. Gildesgame stated that the under the dam management plan it appears that the towns will need to adjust any withdrawals to the plan rather than the other way.

V O T E	Butler moved with a second by Haas to approve Ashland's request to increase its Water Management Act withdrawal volume to serve Hopkinton, as per the July 13, 2000 memo to the WRC. The motion passed with seven in favor and one abstention.
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Agenda Item 5: Proposed change to the Interbasin Transfer Act regulations regarding third party standing

Smith stated that we had discussed this item at the July meeting. Drury reminded the Commission that Kerry Mackin had requested that the WRC's informal policy of allowing third parties to move issues forward for review under the Interbasin Transfer Act be formalized. Staff convened a task force at the Commission's direction last March and proposed some regulation changes. These changes would allow third parties to request that the WRC determine whether actions are subject to the Interbasin Transfer Act. The proposed regulation changes were drafted with help of Nancy Kurtz, legal counsel for the MWRA and Ron Washburn, legal counsel for

DEM. The changes were presented to Commission in April and then brought back to WRC last month. Clayton made a few changes last month, which are shown in the version sent prior to this meeting. The changes will clear up ambiguities in the existing regulations about how third parties can participate in bringing matters to the attention of the WRC. Smith noted that a vote today would not change the regulations, but will actually only begin formal rule making process.

Haas stated that DEP would like to ask that this vote be delayed. DEP has not resolved internal concerns with the language. They are concerned that the changes as proposed may open up an appeal process for third parties not currently granted to them. There is a big difference between a ten citizen lawsuit and giving specific rights to one person in the regulations. DEP will work on the language with the WRC staff.

Smith stated that this raises a fundamental issue. Is the proposed change more than a wording change? Is this providing a new level of standing? This was not the Commission's intention, and the task force's understanding was that this did not. The Task Force's aim was to clarify jurisdiction under the Act, not give special standing. DEP has stated that just by mentioning them in regulations we are giving them special standing. It is worthwhile having the legal counsels get together to determine what this does or does not mean.

Clayton expressed dismay that we had been at this for some time and that now with another legal review it was highly unlikely that we would be able to act on it in September. Webber stated that we need to be very clear about what we want to change and what we do not want to do. Haas stated that DEP was comfortable with goals, but concerned that this language goes beyond the goals. Smith stated we would have DEM and DEP staff work together and make a presentation at the September meeting.

Agenda Item 6: Report from the Stressed Basins Group

Gartland stated that the group met this morning. The latest information was provided in the WRC package. The group is using 67 basins to look at trends in flow. There weren't many significant trends, but there were comments on different ways to look at trends. The other thing the group has done is put together a GIS map. She distributed copies of the map and referenced the large copy hanging on the wall. This map is preliminary. The "Red" area stressed basins are highlighted in orange. The "Yellow" areas are in yellow or green. White areas are areas where there is no information. There are only a few red areas. But data is lacking in a lot of areas, therefore more gages will be added to the analysis (probably four more).

There was discussion of the stressed classification. The group is focusing on just the stressed areas, and moving away from the red yellow and green classification. There was concern about defining something as unstressed which may be interpreted as pointing to areas that are suitable for development, when that was not necessarily the case. The decision was to keep the tiered classification, but change the names and focus more on how use this and what the tiers mean. One use is to determine levels of mitigation for projects developed in these areas. Red areas would require more mitigation than other less stressed areas.

Another proposal made by the group was to monitor streamflow in small rivers. The instream flow task force has been working on this for some time and has put together a proposal to monitor small rivers. The stressed basin group has focussed mainly on larger rivers where there are existing gages in the interim, until we could fill in the data gaps. One problem is making sure larger drainage areas are not overshadowing what's happening upstream in smaller drainages. We will be exploring this further.

The next Stressed Basin Group meeting will be in October. At that time we will have a draft report summary of stressed basins and the interim method for classifying stressed basins and suggestions on how it will be used. Gildesgame stated this work was ground breaking on the national level. Smith stated that the group is growing as more people hear about what we are doing. Clayton asked if the final report will incorporate specific recommendations on how to take the finding of this group to policy guidelines and appropriate regulatory action. Gartland stated that we hope to have list of basins and classifications and what they mean, especially for mitigation. But we need to keep it flexible for other uses and leave it up to regulators to decide what the mitigation would be.

Haas stated that we don't want to be accused of adding more burdens. There should be different standards for unstressed areas. Smith stated that we asked the regulatory programs how they might use this. Now it can be used to give direction to communities, both positive and negative. None of these definitions are cut and dried.

McGinn advocated measurements in small streams because this will have more applications. He suggested teaming with FEMA and MEMA. Cohen asked if there had been a determination of what was causing the stresses to the basins. Gartland answered that they were not making that determination. In some cases it may be totally natural causes. What we are saying is that these are the worst basins in the state and we don't want them to be any further stressed. Cohen stated that there will be some causes of stress that we can control. There may be ways to reduce existing impacts. We need to also apply this to existing projects. Smith stated that's where the watershed teams will be able to take this to the next level. Clayton said this is an import first step and we should take carefully reasoned actions, in spite of the limitations.

Gartland stated that there was a spin off project: water use data was sent to USGS to computerize. GIS has great potential. Webber agreed with McGinn that this was an opportunity to work with FEMA and MEMA, as well as DEM Dam Safety to get gages on smaller streams. He commended staff and everyone who participated in task force for doing innovative and creative work and cited links between this and "carrying capacity" of park lands. There is an opportunity to share ideas and models. This could have broader implications.

Meeting was adjourned.

